



515312

*Life Systems, Inc.*

Submitted to:

Engineering-Science Company  
McLean, VA 22102

Attention: Dr. Timothy G. Shea  
Director Environmental Engineering

TR-519-2-4A

REILLY TAR TECHNICAL SUPPORT

Revised Work Plan

Prepared Under

Project 1238

for

EPA Technical Directive 05, Work Assignment 25,  
Prime Contract 68-01-6312

April 13, 1982

Approved:

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**1.0 INTRODUCTION**

This Work Plan is divided into eight sections in addition to this Introduction:

- 2.0 Statement of Objectives
- 3.0 Technical Directive Approach
- 4.0 Statement of Work
- 5.0 Staffing
- 6.0 Deliverables
- 7.0 Schedule of Work
- 8.0 Estimated Level of Effort and Estimated Cost
- 9.0 References

The Work Plan describes the proposed technical efforts and estimated costs for EPA's Technical Directive (TD) 05, Work Assignment 25, Contract No. 68-01-6312, Reilly Tar Technical Support.

2.0 STATEMENT OF OBJECTIVES

Life Systems shall furnish the necessary facilities, materials and the necessary professional, technical and supporting personnel for performance of the work required by TD 05. The objective of this effort is to provide Expert Witness Nominees qualified in the human toxicological effects of polynuclear aromatic hydrocarbons (PAHs) and other coal tar or creosote constituents. Further, to provide Expert Witness Nominees with chemistry expertise in coal tar constituents and the distillation of coal tar to make creosote. From these Expert Witness Nominees, EPA will select the two best qualified. Those selected will then assist the government in its litigation actions against Reilly Tar.

### 3.0 TECHNICAL DIRECTIVE APPROACH

This TD is the fourth issued under the Subcontract. The objective of our approach is to provide an adequate level of control to regulate cost and ensure schedules and performance are met but allow for sufficient flexibility to respond to changes within the Statement of Work as events dictate.

The approach is to fully satisfy the requirements of the Subcontract concerning approvals and issuance of TDs but enable the EPA staff to have access to the Expert Witness Nominees and later, the Expert Witnesses selected by EPA for technical discussions.

Life Systems has obtained clarification of the TD from EPA to assist in development of criteria for selection of Expert Witness Nominees and to write instructions to them.

### 3.1 ES, EPA and LSI Coordination

All contacts with ES will be directly with LSI Program Manager. The Program Manager will also function as the point of contact for all contacts from the EPA Project Officer.

All contractual correspondence to ES will be signed by the LSI Contract Administrator or in his absence by the LSI Program Manager. Such correspondence will identify the contract number, TD number, the senders initials, month and number of the letter submitted that month. All technical correspondence to ES or EPA will be by letter, signed by the Program Manager or his designee in his absence.

It's an objective that telephone discussions between EPA and LSI will be as scheduled in this Work Plan. If any party feels there is a problem that needs immediate attention, however, a telephone call can be placed.

If TDs require any meetings involving LSI personnel with EPA at least ten working days in advance of the meeting an agenda will be prepared and distributed to interested personnel. The agenda will contain information appropriate to support the purpose of the meeting.

### 3.2 Confidentiality Requirements

A signed Statement of Familiarity and Compliance with Confidentiality Requirements contained in EPA Contract 68-01-6312 will be sent to ES for each consultant or LSI employee who has access to confidential information as part of this TD. All analytical data and site descriptions shall be regarded as confidential information.

### 3.3 Program Organization

For technical matters the principal parties within EPA, ES and LSI are Ms. Julie Klaas, EPA Project Officer, Dr. Tim Shea, Technical Representative for ES and Dr. Roy Reuter, LSI Program Manager, respectively. For this TD Mr. Michael Kosakowski is the primary technical contact at EPA for TD specific efforts within the Statement of Work.

For contractual matters the interfaces will be between the ES Contracting Officer, Mr. Joe Van Gieson and LSI's Contract Administrator, Dr. Rick A. Wynveen.

#### 4.0 STATEMENT OF WORK

The program developed to perform TD 05 consists of the tasks cited below. Task 1.0, Technical Directive Planning, describes those initial efforts necessary to prepare this Work Plan. Tasks 2.0 through 5.0 describe the specific efforts that will be performed to complete the technical requirements of the TD. The tasks are organized by type of effort required. They are not listed in chronological order.

The Statement of Work includes all Tasks projected as if the case will proceed to trial. Actions by the defendant, the court or EPA may later eliminate the requirement for some Tasks.

##### Task

#### 1.0 Technical Directive Planning.

- 1.1 Review the TD and initiate coordination with EPA Project Officer, EPA Technical Contact and ES Technical Director. Obtain clarification on technical and administrative aspects of the TD. Conduct preliminary discussions on Expert Witness qualifications and data availability.
- 1.2 Clarify TD technical aspects through telephone conversations with EPA Technical Contact.
- 1.3 Identify in-house technical management personnel required for performance of the TD. Specifically, identify the Task Manager, who will have day-to-day technical responsibility for the performance of work under the TD.
- 1.4 Prepare TD Plan and Schedule reflecting internal milestones and workload estimates. Prepare TD cost estimate.
- 1.5 Prepare a Work Plan reflecting major milestones and interface with EPA and ES. Submit Work Plan including a TD Cost Estimate to ES and Prepare other planning documents as required.

#### 2.0 Assemble the Technical Team required to perform the TD.

- 2.1 Expert Witness Nominees. Using the Expert Witness selection criteria developed from review of the TD and discussions with the EPA Technical Contact identify six (6) Expert Witness Nominees. Three (3) Experts will have expertise in the human toxicological effects of polynuclear aromatic hydrocarbons (PAHs) and other coal tar or creosote constituents. Three (3) additional Experts will have expertise in the chemical aspects of coal tar constituents and the distillation of coal tar to make creosote.
- 2.2 Confirm the availability of the six (6) Expert Witness Nominees selected for this TD. Submit their names and qualifications (one page cover sheet, resume and two journal articles or other relevant scientific publications they've authored) to EPA Project Officer.
- 2.3 Expert Witness Selection. After EPA has reviewed the qualifications material on each nominee and the Experts have reviewed the preliminary data, separate conference calls will be held between each Expert Witness Nominee, the EPA Technical Contact and the ICAIR Staff.

- 2.4 Follow-up conference calls will be held between the Expert Witness Nominees (assumed six (6) Experts will be recommended by EPA Technical contact), Justice Department Lawyers, the EPA Technical Contact and the ICAIR Staff to further evaluate the nominees.
- 2.5 The complete data summary will be provided to the Expert Witness Nominees for their review and use in completing Tasks 2.6 and 2.7 below.
- 2.6 Technical Directive Data Assessment Report
  - 2.6.1 The three toxicologist Expert Witness Nominees shall prepare a report reviewing the human toxicological effects of PAHs and other coal tar or creosote constituents (estimated length of three to ten single spaced pages).
  - 2.6.2 The three chemist Expert Witness Nominees shall prepare a report reviewing the chemistry associated with coal tar constituents and the distillation of coal tar to make creosote (estimated length of three to ten single spaced pages).
  - 2.6.3 Hard copies of all references cited in the reports shall be provided to EPA with the submittal of the reports.
- 2.7 The Expert Witness Nominees (assumed to be six (6) individuals) shall be interviewed by the EPA representatives and the Justice Department Lawyers to further assess their capabilities as an Expert Witness for the litigation (assumed interviews will be in Minneapolis, MN).

3.0 Affidavit Preparation and Submittal.

- 3.1 Those selected to appear as Expert Witnesses (two (2) assumed) shall prepare an affidavit in final form and have it notarized.
- 3.2 Submit the affidavit to ES and EPA.
- 3.3 Estimate that the affidavit will not be less than five nor more than ten single spaced typewritten pages in length.

4.0 Telephone Technical Advice.

- 4.1 Provide by telephone, technical advice to assist EPA and the Department of Justice in the preparation of the case.
- 4.2 Six telephone calls each of one hour duration are expected per witness selected.

5.0 Pre-trial Meeting.

Revised

- 5.1 The two (2) Expert Witnesses selected (one in each area) shall attend two days of pre-trial meetings in Minneapolis, MN..
- 5.2 Discuss TD Data Assessment Reports and Affidavits. Provide technical advice for trial preparation.

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5.0 STAFFING

The Program Manager for the Subcontract is Dr. Roy H. Reuter. He is responsible for the management of all contract technical activities and liaison with the ES Technical Director and the EPA Project Officer. Dr. Rick A. Wynveen is the Contract Administrator. He is responsible for all contractual matters.

Mr. Robert J. Rosing is the Task Manager for this TD. He will be responsible for the day-to-day management of the TD once the Work Plan has been approved.

Expert Witness Nominees will be selected on the basis of their overall qualifications, knowledge of PAHs, coal tar constituents and creosote and related research efforts. The Expert Witness' proximity to Minneapolis will be considered in identifying nominees to augment the credibility of the Witness.

6.0 DATA REQUIREMENTS LIST AND SCHEDULE

The Data Requirements List for TD 05 is summarized in Table 6-1 below.

TABLE 6-1 DATA REQUIREMENTS LIST AND SCHEDULE

LSI Date No.	Description or Title	Due Date	Copies <sup>(a)</sup>	
			No.	To
TR-519-2-4	TD Work Plan, Reilly Tar Technical Support	04/02/82	4 1	ES EPA
TR-519-2-4A	Revised TD Work Plan, Reilly Tar Technical Support	04/20/82	4 1	ES EPA
D-109 through D-114	Technical Directive Data Assessment Reports (one per each of six (6) experts)	05/25/82	1 5	ES EPA
D-115, D-116	Affidavit (one per each of two (2) experts)	06/01/82	1	EPA

(a) ES = Dr. Timothy Shea, Technical Director  
EPA = Ms. Julie Klaas, Project Officer

**7.0 SCHEDULE OF WORK**

The schedule of work for the TD is shown in Figure 7-1. This schedule reflects the major milestones for completion of the TD. Figure 7-1 will be upgraded monthly to reflect actual performance and incorporated in the Monthly Progress Reports. This format is intended to permit the EPA Project Officer and ES Technical Director to rapidly identify the cause and impact of any schedule modification proposed to experienced.

# SCHEDULE STATUS REPORT

Project No.: 1238

Status As Of: 04/13/82

TITLE: Reilly Tar Technical Support

T/WA No.: 05

CONTRACT NO.: 68-01-6312

REPORT NO.: Revised Original BY: RHR

TASK NO.: N/A

RESPON. IND.: R. H. Reuter

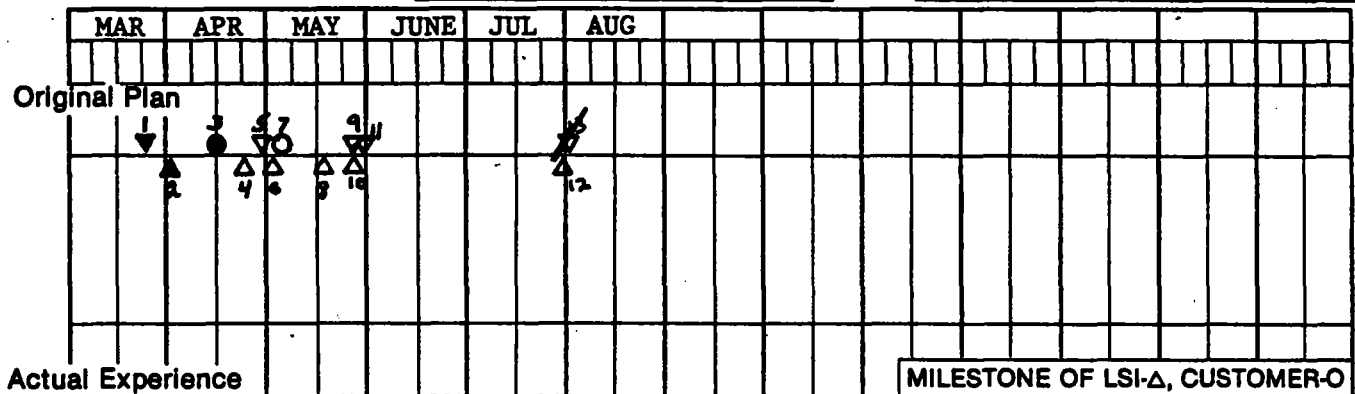
ORIG. COMPL. DATE: 08/02/82

DURATION:

CURRENT COMPL. DATE: 08/01/82

DIFFERENCE: -1 DAYS

TIME FROM START DATE OF: 03/24/82



COMMENTS:

NO.	MILESTONE DESCRIPTION	COMPLETION DATE		
		ORIGINAL	REVISED	ACTUAL
1.	Receive Technical Directive	03/24/82		03/24/82
2.	Submit Work Plan	04/02/82		04/02/82
3.	Approval of Work Plan by ES	04/16/82		04/12/82
4.	Submit Material on Expert Witness Nominees	04/23/82		
5.	Conference Calls between EPA Technical Contact and the Expert Witness Nominees (individually)	04/30/82		
6.	Conference Calls between the Lawyers, EPA staff and the Expert Witness Nominees (individually)	05/03/82		
7.	Transmittal of complete data summary to ICAIR from EPA	05/05/82		
8.	Review of data summary by Expert Witness Nominees	05/18/82		
9.	Submit Technical Directive Data Assessment Reports and References.	05/25/82		
10.	Face-to-face interviews between the Expert Witness Nominees, the Lawyers and EPA staff. to be held in Minneapolis, MN	05/25/82		
11.	Submit affidavits	06/01/82		
12.	Pre-trial meetings	08/01/82		
13.	Trial Testimony	08/02/82	deleted	

FIGURE 7-1

## 8.0 ESTIMATED LEVEL OF EFFORT AND ESTIMATED COST

A total of 661.5 labor hours are estimated for this Technical Directive. The total estimated cost is \$44,057. The analysis of the estimated cost is provided in Figure 8-1.

The cost estimate for this TD includes a distribution of estimated program-wide management and administrative costs (e.g., monthly progress report preparation) since all program costs are to be assigned to active TDs.

The planned budget is summarized in Figure 8-2. This figure also identifies the major milestones. It will be upgraded monthly and incorporated as part of the Monthly Progress Reports. Travel costs were calculated assuming the Expert Witnesses would be traveling to Minneapolis, MN.

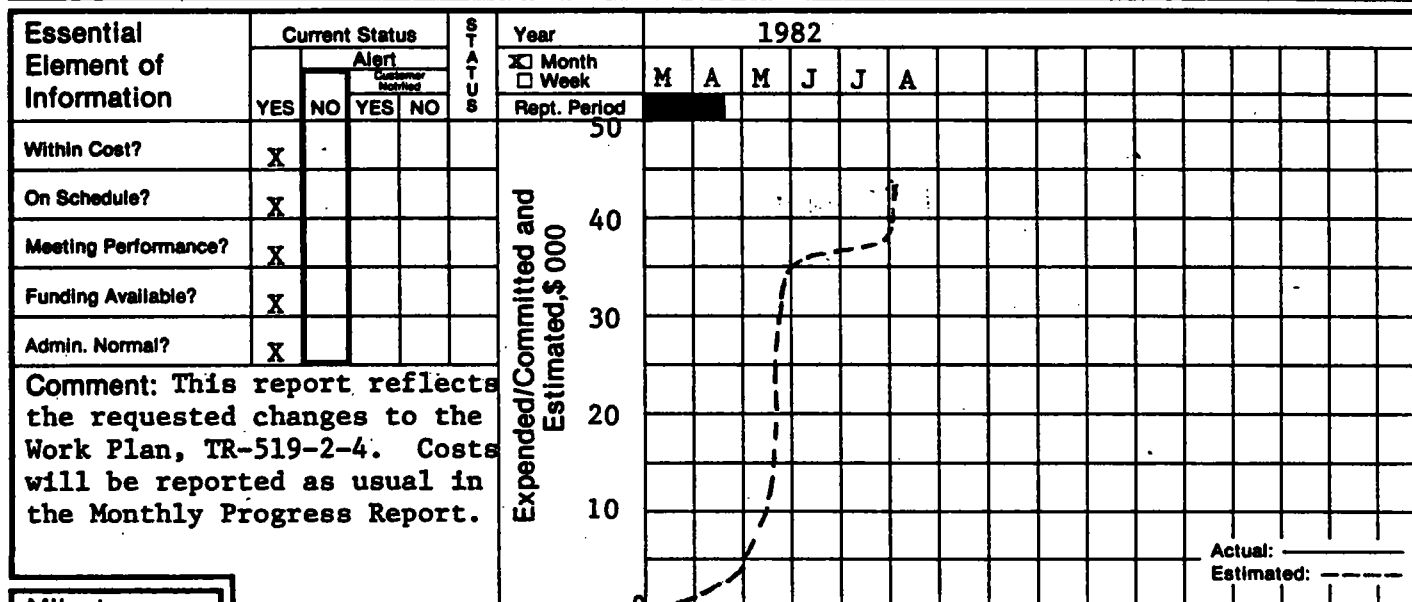
## ESTIMATED COST ANALYSIS

TD 05

<u>Description</u>	<u>Hours</u>	<u>Cost, \$</u>
Total Direct Materials		0
Estimated Labor:		
Clerical/Data Reduction	41.0	
Level 1 Professional	0	
Level 2 Professional	70.0	
Level 3 Professional	8.0	
Level 4 Professional	<u>34.5</u>	
Total Direct Labor Cost	153.5	2,537
Estimated Other Direct Costs		
Travel		5,450
Consultants	508.0	21,985
Other (Conference Calls, Express Mail, Reference Acquisition, etc.)		<u>1,200</u>
Total Other Direct Cost		28,635
TOTAL ESTIMATED COST AND FEE	661.5	44,057

FIGURE 8-1

<h1>WORK ASSIGNMENT STATUS REPORT</h1>			WA No. <div style="border: 1px solid black; text-align: center;">05</div>	Proj. No. <div style="border: 1px solid black; text-align: center;">1238</div>
<b>Title:</b> <u>Reilly Tar Technical Support</u>			Date (Mo/Yr) <div style="border: 1px solid black; text-align: center;">04/82</div>	
<b>WA Value</b>	<b>\$</b> 44,057	<b>Description:</b> 1. Provide (6) Expert Witness Nominees to EPA. 2. Participate in telephone interviews. 3. Review background material. 4. Submit TD reports. 5. Interviews in Minneapolis. 6. Submit Affidavits. 7. Attend pre-trial meeting.		
<b>Proposal No.</b>	TR- 519			
<b>Contract No.</b>	68-01-6312			
<b>Customer</b>	Engr. Sci.			
<b>Contract Type</b>	<input checked="" type="checkbox"/> Cost Plus Fixed Fee <input type="checkbox"/> Fixed Price			
<b>Personnel:</b> PM: <u>Dr. R. H. Reuter</u> TM: <u>Mr. R. J. Rosing</u>		<b>End-Items:</b> 1. Work Plan 2. Material on Expert Witness Nominees 3. Six Technical Directive Data Assessment Reports 4. Two Affidavits		



Milestones												
1. Receive Technical Directive												
2. Submit Work Plan												
3. Approval of Work Plan by ES												
4. Submit Material on Nominees												
5. Conference Call Interviews												
6. Transmittal of Data Summary to ICAIR												
7. Review of Data Summary												
8. Interviews and TD Report Submittal												
9. Submit Affidavit												
10. Pre-trial meeting : (trial deleted)												

**Program Highlights:**

Approved: B. J. Rosing 4/2/82  
 Prog. Mgr./Date

Acknowledged: B. J. Rosing 4/2/82  
 Bus. Area Mgr./Date

FIGURE 8-2

9.0 REFERENCES

The following listing represents the sources of information that were available through informal coordination with EPA. This information had an impact on the level of effort estimated in this Plan.

1. Meeting between Mr. Michael Kosakowski, Ms. Julie Klaas, Dr. Roy H. Reuter and Mr. Robert J. Rosing on 03/05/82.
  - a. Indicated that the case is of great importance and therefore, the Expert Witnesses shall be very prominent.
  - b. It would be advantageous, but not mandatory, to have Experts from the Northcentral or Midwestern regions of the United States. Quality of the Expert Witnesses, however, should not be compromised for geographical considerations.
  - c. The length of the Expert Witness' Data Assessment Reports will be not less than three or more than ten single spaced pages in length. No outline will be provided for the reports since the author's approach will assist in the evaluation.
  - d. At least two (2) of Expert Witnesses (one toxicologist and one chemist) will be selected from the group of six nominees.
2. Telephone conversation between Mr. Michael Kosakowski and Mr. Robert J. Rosing on 04/12/82.
  - a. Communicated approval of the Work Plan with the following change: Extend the pre-trial meeting from one day to two days but delete the requirement for trial testimony under this TD. The cost will not be impacted by this change.
  - b. The trial is not expected to take place until late 1983, beyond the expiration date of this subcontract. Therefore, trial testimony will not be included in this TD.

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